



LEWISITES

Agent Overview:

Lewisites are highly reactive vesicants or blister agents also known as 2-chlorovinyl dichloroarsine, O-ethyl S-2-diisopropylaminoethyl. In its pure form, they are oily, colorless liquids; but in their impure form they appear amber to black. Lewisites smell like geraniums and blister skin and mucous membranes. They include three isomers designated L-1, L-2 and L-3; and contain arsenic. Signs and symptoms can be delayed by several hours after exposure and include skin reddening and blistering (dermal erythema and blistering within 30 minutes to 12 hours, and deep skin burns); respiratory effects (pharyngitis, cough, dyspnea, edema frothing mucous); eye injury (conjunctivitis and burns); neurological effects (restlessness, weakness, subnormal temperature, severe hypotension); nausea and vomiting, profuse nasal secretions and violent sneezing.

Lab Specimen Submittal:

Authorization by Dr. Jane Getchell, Director DPHL; Christina Pleasanton, Deputy Director DPHL; or Tara Lydick, Chemical Terrorism Coordinator.

Type of Specimens

Urine: 25mL-50mL screw-cap container

Necessary for Testing:

Whole blood:

- Three, 5 or 7 mL purple-top (EDTA) tubes (vacuum fill only) AND
- One, 5 or 7 mL gray-top or green-top (vacuum fill only) AND
- Two empty urine cups and two empty blood tubes for each lot # submitted.

Packaging Instructions:

Urine: freeze specimen upon collection and ship on dry ice; label specimens and package individually; wrap with absorbent material.

Whole blood: place filled tubes in a shipping rack for stability, wrap the tubes in absorbent material, and secure with tape. Place the packaged tubes in a secondary unbreakable container. Specimens may be shipped cold but *must not* be frozen.

All: wrap sample containers and layers with tamper-proof, waterproof forensic evidence tape initialed by collector, being careful not to cover the sample labels. Ship to DPHL as Biological Substance, Category B (Packing Instruction 650).

Receiving Specimens at DPHL:

Authorized specimens are received at the lab's rear (loading dock) entrance. Submitters must present ID complete proper forms.

Handling of Specimens:

Follow chain of custody procedures. Freeze urine specimens.

Reporting Results:

Reference laboratory will notify DPHL as soon as possible. The Potential Exposure Call Log and Information form will provide information for notification of testing results outside of the DPHL.

Contact Information:

Jane Getchell, DrPH, Director DPHL, 302-223-1520 (24/7 coverage)

24/7 Emergency Contact Number: 1-888-295-5156

Revised: 04/08